

The unpredictability of GE crops was further highlighted in 1997, when farmers growing GE cotton reported that the plants had stunted growth, deformed root systems and produced malformed cotton bolls.

IS GE FOOD SAFE?

Despite endless reassurances by biotechnology companies and the Food and Drug Administration (FDA) that GE food is safe to eat, several concerns have arisen. Genetic engineering has the potential to introduce new allergens and toxins into food, increase levels of natural toxins, reduce the nutritional quality of food and increase the rate of antibiotic resistance in bacteria. Yet, our experience with GE crops is limited. They have only been growing on a wide scale for five years and, consequently, have only been part of the American diet for the same amount of time. The long-term consequences of a diet of GE food are therefore unknown. To date, not a single peer-reviewed study has been conducted on the long-term consequences for humans of eating a diet of GE food. Moreover, without segregation and labeling protections in place to inform consumers about what they are eating, it will be difficult to pinpoint and monitor whether the presence of GE material in food products is impacting human health.

The lack of long-term safety studies has correctly led the Environmental Protection Agency (EPA) to not approve Starlink corn for human consumption because of concerns with potential allergens. Unfortunately, this corn was found in Taco Bell taco shells found on our grocery stores. Kraft, the maker of these taco shells, recalled 2.5 million boxes of these contaminated shells.

ENVIRONMENTAL IMPACTS ASSOCIATED WITH GE FOOD

Despite claims that GE crops will help the environment, to date, the main focus of biotechnology has been to generate herbicide resistant crops and pest and disease resistant crops—crops that encourage more intensive use of pesticides. The failure of GE to move agriculture in a more sustainable direction is a serious threat to the environment.

Equally serious is the threat of genetic pollution which is potentially irreversible. Studies are revealing that predictions of gene flow, harm to beneficial insects, insect resistance, and the possibility that GE crops could become weeds are already coming true. Early experiments showed that pollen from GE herbicide resistant canola could spread to their wild relatives—radish plants—in nearby fields, highlighting the possibility of new “superweeds.” More recently, a Canadian farmer, who had planted three different GE herbicide-tolerant crops, reported that a canola plant in his field was resistant to the three different herbicides. Cross pollination by GE crops has contaminated organic crops, in one instance forcing an organic tortilla manufacturer to recall 80,000 bags of tortilla chips. The threat of cross pollination has also prevented organic farmers from planting certain crops in some parts of the country.

Numerous studies have shown the potential fallout of transgenic “insect-resistant” crops on the environment. Both lab and field studies have confirmed that pollen from B.t. corn is lethal to monarch butterfly larvae. Swiss entomologists have found that lacewings and lady bugs are negatively impacted when they feed on organisms that have ingested the GE corn. Research undertaken at the New York University shows that contrary to expectation, B.t.

toxins bind to soil particles and can persist in the soil for up to 250 days. These toxins have been shown to harm soil microorganisms that break down organic matter.

Given that half of our cotton crop and nearly one-third of our corn crop are GE “insect resistant” varieties, it is alarming that such studies were not conducted earlier, underscoring the fact that the experiment with GE crops is taking place in farmers’ fields and on consumer plates rather than in controlled, laboratory settings.

Insect resistance to the B.t. toxin poses a serious threat for organic farmers who use the toxin in a natural spray as part of an integrated pest management scheme. A study published in *Science* found that a common pest of cotton was able to build up resistance to insect resistant varieties very quickly. If the toxin is rendered useless, organic farmers will be deprived of an essential tool.

Not content with simply engineering food crops, biotechnology companies are introducing new test tube “products.” GE engineered salmon that are close to commercialization may be able to “outcompete” wild salmon in reproduction and further deplete this endangered species. Genetically engineered trees are also in the product line and may introduce ecological threats to our national forests.

CAN BIOTECH FEED THE WORLD?

There is no question that the nations of the world must take action to stop global hunger. It is a travesty that 800 million people go hungry each day. Biotech proponents argue that genetic engineering is the solution to the problem because it will increase crop yields to feed a growing population. A techno-fix, however, ignores the root causes of hunger.

Hunger persists today despite the fact that increases in food production during the past 35 years have outstripped the world’s population growth by 16 percent. Indeed, the United Nations Food and Agriculture Organization recently stated that growth in agriculture will continue to outstrip world population growth. The Institute for Food Policy notes that there is no relationship between the prevalence of hunger in a given country and its population. The real causes of hunger are poverty, inequality and lack of access. Too many people are too poor to buy the food that is available (but poorly distributed) or lack the land and resources to grow it themselves.

The much heralded “Green Revolution” was an example of the failure of new technology applied to farming to reduce hunger. Using the technology, developing countries significantly increased crop yields, but they nevertheless failed to eliminate hunger, because they failed to address the root social and economic causes of hunger. Furthermore, the Green Revolution exacerbated poverty and social inequality. It favored larger, wealthier farmers who could afford the new high yielding crop varieties and the chemical fertilizers, pesticides, and irrigation systems that accompanied them. Left behind were poorer farmers unable to afford such inputs. In the meantime, the heavy use of chemical fertilizers and pesticides generated resistant pests and degraded the fertility of the soil, undermining the very basis for future production.

The growing use of patents to “protect” biotechnology innovations also threatens subsistence farmers in the developing world and could exacerbate hunger. Patents have been

taken out on plants, animals, bacteria as well as genes, cells and body parts. Sanctioned and imposed by the global trading system, this “commodification of life” has allowed multinational companies to patent staple crops in developing countries such as yellow beans in Mexico, South Asian basmati rice as well as medicinal herbs, livestock and marine species. Such a predatory system threatens to enable companies to maximize their control over farming processes and the world’s food resources.

Landmark studies are showing that traditional farming methods, including multi-cropping and small scale techniques are proving to be just as effective in producing high yields as conventional farming. Most recently, in one of the largest agricultural experiments ever, thousands of rice farmers in China were able to double the yields of their crops simply by planting a mixture of two different rices—a practice that did not require using chemical treatments or investing any new capital. Clearly, these types of farming methods are suited to local needs and ecosystems. They will protect the environment and increase an affordable food supply. Biotechnology, however, will likely repeat the failure of the Green Revolution’s fertilizers and pesticides. Biotech will not solve the problem of world hunger but may exacerbate it.

HONORING BRUCE S. HASLAM

HON. JOSEPH M. HOFFEL

OF PENNSYLVANIA

IN THE HOUSE OF REPRESENTATIVES

Wednesday, November 1, 2000

Mr. HOFFEL. Mr. Speaker, today I recognize Lieutenant Bruce S. Haslam, who is retiring after 26 years from the Abington Township Police Department in Montgomery County, Pennsylvania.

Lt. Haslam began his career in law enforcement as a Patrol Officer and moved up the ranks to Detective Lieutenant. He has been involved in many programs throughout his tenure and the community has benefited greatly from his service.

Lt. Haslam developed and implemented one of the first Officer Street Survival programs in the region. He has been involved in the Abington Police D.A.R.E. program from its inception. Today, the D.A.R.E. program is taught in all Abington schools.

Helping victims of domestic violence has been a priority for Lt. Haslam. He coordinated domestic violence issues for the department by working with state and county agencies to combat this abuse.

Lt. Haslam served the larger community as well. He was in active duty in the United States Army and is now a Colonel in the U.S. Army Reserves. He participated in special assignments in Haiti in 1994 and returned to service in Bosnia from 1998–1999.

It is an honor and privilege to recognize Lt. Bruce Haslam as he retires from the Abington Township Police Department. I congratulate him on 26 years of extraordinary service to the people of Abington and the United States of America.